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A. BASIC RAW MATERIALS

1. Hard Coal:

Prior to World War II the area of the present Soviet Zone used an average 12-14 million tons of hard coal annually. Despite dismantling of many industrial plants, war damages, and cessation of war production, the present need is still 10-12 million tons. Before 1945 the area received its hard coal supply from Silesia (40%). The DDR now produces only about 3 million tons (Saxony) and since 1948 considerable quantities have been imported from Silesia. Most of the available hard coal, however, is needed for the production of gas and cement. Hard coal, therefore, remains a primary bottleneck.

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2. Soft Coal:

The Soviet Zone contains one of the largest brown coal deposits in Europe. After temporary reduction in the immediate postwar years, brown coal production reached a new high of about 150 million tons in 1950. Local requirements are only 50 million tons. However, since the bulk of the production is exported for hard currency, local industries are still severely rationed. The commodity remains a bottleneck for local consumers.

3. Coke

Principal users of coke are steel plants, copper smelters, and foundries.

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Since 1945 Silesian coke had to be used. It is unsatisfactory because:

a. it is too soft and often smothers under the weight of metal.
b. it has a low heat coefficient and hence requires doubling of quantitative input.

Suitable coke remains a primary bottleneck.

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4. Pig Iron

[redacted] Locally only the Maxhuette, Unterwellenborn, produces pig iron in small quantity. The amounts received from the Soviet Union, Czechoslovakia, and Poland are insufficient to satisfy even essential needs. The situation is quickly deteriorating, some plants fear partial or complete shut-downs for lack of pig iron. A primary bottleneck.

5. SI Steel (open hearth)

Prior to 1945 the area now comprising the Soviet Zone produced very little steel. To meet local needs the plants at Unterwellenborn, Hennigsdorf, and Riesa have been rebuilt and enlarged. In Brandenburg, Kirchmoeser and Burg, new plants have been erected, more are in the planning stage (see also Item 9). Production in 1950 will be about one million tons, demand is at least 3.5 million tons. A very serious bottleneck.

6. Scrap Iron

Soviet Zone steel is produced by use of 85% scrap iron and 15% pig iron. The DDR cannot furnish the 850,000 tons scrap iron needed for present production plans of one million tons of steel, nor is scrap available through imports. A special commission has been formed to "collect internal reserves", constant scrap iron drives are under way. It is estimated that present reserves may be sufficient to cover the first two years of the Five-Year-Plan, but by 1951 the situation will become critical and some means to import scrap will have to be found, especially if the production is to be increased to meet indigenous needs (see Item 5). A potential bottleneck.

7. Copper

Eighty percent of Germany's copper sources are located in the Soviet Zone. The production of pure copper is in the hands of the VVB Mansfeld, Eisleben. In 1949, 8,000 tons of copper were produced, the 1950 schedule calls for 11,000 tons. The raw material for the additional 3,000 tons must be provided from copper stone as salvage. Scrap drives produced only 135 to 140 tons in the first nine months of 1950. [redacted] It is very doubtful that the 1950 quota can be met. Despite all efforts, industrial copper is extremely scarce. The entire production is under control of the occupation authorities. The bulk of all available copper goes to Wismuth AG, Motorenwerk-Gruendhain, and for export to the Soviet Union. For DDR industries a bottleneck. (see also Items 10 and 50).

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B. SEMI-FINISHED GOODS

8. Iron and Steel

The situation has seriously deteriorated since the embargo in February 1950, despite large scale illegal operations [redacted]. "There is no plant in the Soviet Zone that does not have difficulty with the acquisition of iron and steel products [redacted] the equipment, even in such vital plants as SAG Gasoline plant at Boehlen, can only be patched instead of overhauled for lack of essential steel. One of the managers is quoted as stating; "Unless the situation improves during 1950, production will have to be curtailed." Wismuth AG and other plants are quoted with similar comments. A crucial bottleneck.

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9. Sheet Metal (fine and coarse)

The main sources of black iron plate are Maxhuette, Unterwellenborn, and the rolling mills at Hennigsdorf. The new plants at Burg, Kirchmoeser and Brandenburg are not yet in operation (see Item 5). Despite all efforts to increase the production of existing plants, the addition of new plants, and the conversion of others, (Hettstedt and Ilsenburg) the quantity and quality of available sheet metal cannot meet the demand. Even when the production quotas are met on paper, the high percentage of rejects reduces the amount available for industry; for instance, of the 1,000 tons of rolling products produced by Maxhuette in July 1950, only 10% were classified as first

quality, only a liberal interpretation of classification norms allowed another 40 percent to be graded as acceptable. In October 1950 again, 50% of the production had to be used as scrap. Since SAG's and plants working for reparations may accept only first quality, plants working for the German economy rarely get qualities they would normally consider acceptable. Plant officials cite the following reasons for the low quality output:

a. The input materials, scrap as well as coke, are of low quality (see above)

b. The rolling equipment is worn out beyond repair, replacements are not available (see Item 45).

The expedients necessary to keep production going at all, are reflected in the quality of the finished product. A primary bottleneck.

10. Non-ferrous Metals

As a result of the copper shortage (Item 7) copper alloys such as brass, bronze and tombac are equally short in supply. The result is a shortage of bearings requiring these alloys as well as a shortage of wires and cables. These shortages, in turn, often require makeshift maintenance that endangers public safety, especially on high tension wires. The only aluminum smelter in the Soviet Zone, in Lauterbach, has been dismantled. At present, the only aluminum production consists of salvaging war materials. The reserves are dwindling fast. A potential bottleneck.

11. High-Grade Steel Alloys

The DDR has no facilities to produce high-grade steel alloys required for the production of tools or bearings. As a substitute for tool steel VEB Hartmetallwerk Immelborn produces a substance known as "Widia", a sheet metal that is welded on to the surfaces of tools. Most of their output goes to Wismuth, even VEB's have as yet received no allocation. A plant in Freital-Doelden (vicinity Dresden) is scheduled to produce the substitute for the German economy. There is also a severe shortage of such metals as molybdenum, nickel, chrome, tungsten and others for which there are no local sources. The result is a shortage of acid-proof metals for the chemical industries and other branches requiring hard steel. (see also Items 34 ff).

C. OTHER INDUSTRIAL MATERIALS

12. Soda

Sodium carbonate or calcined soda is used primarily in the chemical industries, but is also required in the production of glass and ceramics. The DDR has two major soda producing plants, the Sodawerk Stassfurt, and the Sodawerk Bernburg. Each plant has an annual production quota of 50,000 tons, neither plant is likely to produce more than 40,000 in 1950. Total allocations for 1950 amounted to 127,000 tons. [redacted] 50X1-HUM [redacted] But even if these plans could be fulfilled, the supply would be inadequate. Most soda using plants complain that their allocations must be doubled if they are to meet their production quotas. Total demand for the Zone is estimated at 350,000 tons per year. To meet the shortage, the Five-Year-Plan calls for the erection of two additional plants, one at Bernburg and one at Stassfurt. Until the plants are completed, soda will remain at least a secondary bottleneck. 50X1-HUM [redacted]

13. Caustic Soda

The principal users of caustic soda and soda hydroxite are the producers of synthetic fibre materials, the chemical industry (see also Item 33) and Wismuth AG. The production plan for 1950 calls for 150,000 tons, actual production is not likely to exceed 100,000 tons. Total allocations

for 1950 were 167,000 tons, divided as follows: SAG's 24,000 tons, fibre industry 67,000, chemical industry 10,000 tons, all others 6,000 tons. The chief of the Chemistry Section of the DDR Ministry for Industry estimates the demand at 350,000 tons. The Five-Year-Plan calls for an increase of CAUSTIC SOD production facilities up to 250,000 tons per year. Until 1955 at least caustic soda will be in short supply.

14. Oxygen

The principal users of oxygen are the metal industries, especially the shipyards and Wismuth AG. Most industrial oxygen is used for welding. Total demand for 1950 is 40 million cubic meters, total production will not exceed 24 million cbm. To meet the shortage equipment for two new oxygen bottling plants has been ordered from the firms Linides Eismaschinen A.G., Hoellriegels-Kreuth and Messer-Schweisstechnik, Frankfurt/Main. The machines have not yet been delivered. Even if the production of 40 million cbm were assured, the problem is not solved. The DDR has a shortage of at least 50,000 steel oxygen bottles essential for distribution. The DDR has no facilities to produce the bottles 50X1-HUM Even though negotiations for delivery of additional bottles are under way , until the production machinery and the bottles are delivered, oxygen remains a primary bottleneck.

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15. Carbon Bi-Sulphide

This commodity is essential for the production of synthetic fibre. The entire demand of 26,000 tons per annum must be imported 50X1-HUM since the DDR has, at least up to now, no production facilities. Since the synthetic fibre industry works 30% for reparations and export, a cut-off of carbon bi-sulphide would severely curtail the DDR's source of hard currency. A potential bottleneck.

16. Sulphuric Acid

The synthetic fibre industry needs one ton of SO_3 for every ton of cell wool or rayon produced.

Total production in 1949	175,000 tons
Planned production for 1950	246,000 tons
Probable production for 1950	200,000 tons
Planned production for 1955	350,000 tons
Present deficit	50,000 to 150,000 tons

According to the Five-Year-Plan the entire 350,000 produced by 1955 is to be manufactured on a gypsum base rather than the present sulphur basis. Production is to be centralized at the SAG Farbenfabrik Wolfen, all other production facilities are to be used for other purposes. Until the production is increased at least 25%, a secondary bottleneck.

17. Titanic Oxide

Principal users: the synthetic fibre industry and the metal industries (welding electrodes). Known demand, at least 35,000 tons per annum. There 50X1-HUM is no indigenous production (see also Item 35).

18. Gasoline

Production facilities are almost completely in the hands of Soviet AG's. The commodity remains severely rationed, not so much because of lack of production, but because the bulk of production is exported for hard currency. It is estimated that the DDR will produce 350,000 tons of gasoline in 1950. The Five-Year-Plan calls for a considerable increase in production facilities 50X1-HUM

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and additional drillings in Thuringia and Saxony. For the foreseeable future, gasoline remains a bottleneck for the German economy.

19. Diesel Oil

Main sources: Refining of soft coal and synthetic gasoline production. Production in 1950 about 400,000 tons. The Five-Year-Plan calls for an increase of 25 percent in production. At present, the shortage is critical.

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20. Fatty Acids

Essential for the production of soap and other detergents. All types of soap are still severely rationed in the DDR. The available quantities are of poor quality. The average consumer receives only seven ounces of soap per month. Even the production of these limited quantities requires the importation of 50% of all fatty acids used. In 1950, the Hydrierwerke Rodleben, Rosslau, will produce about 6,000 tons of fatty acids while an equal amount will be imported from the West Zones. The Five-Year-Plan calls for a production of 30,000 tons annually by 1955. A secondary bottleneck until additional production facilities are available.

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21. Carbonate of Barium

Principle user: The railroad system and other plants using steam boilers. No production facilities in the DDR. The railroads alone import 2,000 tons annually from West Germany. A potential weak point.

22. Photo Gelatine (emulsion)

The only film producing factory in the Soviet Zone, the Filmfabrik Wolfen, Bitterfeld, the former AGFA plant, is in Russian hands. It produces only the film surfaces, the emulsion is imported. For 1950, DM 675,000 and DM 1.5 million have been alloted for the purchase of emulsion from Dollar countries and West Germany. Ninety-five percent of the 30 million square feet of film produced annually, is exported for hard currency. No bottleneck as long as the emulsion is available.

23. Glycerin

The principal use is for the production of explosives. There is a shortage of about 900 tons per year. It is covered by imports from Dollar countries.

24. Rosin

The primary users are paint and lacquer plants. No industrial quantities are available in the zone or for purchase from Eastern countries. The entire supply of 2,000 tons per year is imported

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25. Toluol

Essential for the production of explosives and synthetic sweetening agents. A by-product of hard coal distillation. There are no toluol production facilities in the Soviet Zone. Until 1949 sufficient quantities were imported to allow production of sweetening agents; since then all available quantities have been used for the production of explosives. Apparently a bottleneck.

26. Hydro-chloric Acid

Until 1949 the supply was about equal to the demand. Thereafter, Wismuth AG suddenly increased its requirement to 1,200 tons per month. Since then all other branches requiring hydr -chloric acid have complained of a chronic shortage. Details unknown, but obviously a bottleneck.

27. Brown Coal Tar

Present production 1.1 million tons annually. Planned production 1.6 million tons. Until production facilities are increased, a considerable shortage.

28. Cyanide

An essential metal hardening agent. No production facilities in the DDR. 1950 production plans call for import of 200 tons valued at 110,000.

29. Wood

The DDR has considerable sources of timber in Thuringia, Saxony and Mecklenburg. Extensive cutting programs have been ordered by the occupation authorities, the bulk of the cut timber goes for reparations. In order to meet the quotas the cutting age for timber has been cut from 150 years to 80 years. The German economy has, nevertheless, great difficulties in procuring timber. According to forestry experts a serious shortage of useable timber can be anticipated by 1952 if present cutting programs are sustained.

30. Leather

The 1948 order of SMA, which gives the occupation authorities exclusive control over all available hides is still in force. Controls are strict. A considerable quantity of hides, especially of the better qualities, are used to meet Soviet Army demands. Leather goods are in extremely short supply on the German market. Most of the indigenous demand is met by use of synthetic materials.

31. Textile Raw Materials

No hemp is grown in the DDR. Only small quantities of flax are grown in Mecklenburg. Most of the necessary wool and all of the cotton needed are imported. Import funds for textile raw materials are very small, hence 80 percent of all textiles used are of synthetic fibre, but again the bulk of the artificial fibre produced is exported. Therefore, textiles are strictly controlled and scarce. (For bottlenecks in the production of synthetic fibre see also auxiliary materials used in their production).

32. Phosphates

The supply of fertilizer made from potash, lime and nitrogen is adequate. There is, however, a shortage of phosphate based fertilizer. Raw materials for the production of phosphate fertilizer are imported [redacted] 50X1-HUM
[redacted] Shortage of hard currency has held production to 50,000 tons annually, compared to a demand of 100,000 tons. A bottleneck of prime importance for the food production. 50X1-HUM

33. Asbestos

No raw material sources in the DDR, but considerable processing facilities. The demand for 1950 was about 5,000 tons, the supply 2,700 tons. (The processing requires the use of caustic soda, see Item 15.)

34. Ball Bearings

The heavy industries in the DDR all complain of a shortage of ball bearings. The Zone has only two plants producing bearings: SAG Leipziger Kugellagerfabrik, Boehlitz-Ehrenberg, formerly DKF, and VEB Kugellagerfabrik Frauenreuth-Thueringen, established 1949 in the former Schnack plant, and one plant producing balls for bearings. SAG Metallwarenfabrik Heller, Marienthal, Thueringen. These plants can manufacture bearings up to 150 mm in diameter. The SAG Leipziger Kugellagerfabrik produces presently the following types: 6200, 6300, 6400, 5100, 5200, 5300, QA Four-point bearings.

The entire production depends upon the delivery of high-grade steel from Western Germany (see Item 11). The bulk is delivered by Deutsche Edelstahlwerke, Krefeld. The Woelitz-Ehrenberg plant received up to 1949, 1,600 tons of high-grade steel annually from Krefeld. After the embargo in February 1950, deliveries were curtailed but source knows that some smaller quantities continue to arrive via SAG Centrale Berlin-Weissensee.

35. Welding Electrodes

Six enterprises in the DDR are presently engaged in the manufacture of welding electrodes, two are SAG's, the other four are as yet private enterprises. SAG Schweisselektrodenfabrik Kjellberg is the largest of the enterprises, it has seven presses, Agil, a private plant in Berlin has three in operation and three in the planning stage, while none of the remainder have more than one. Due to a shortage of raw material the production facilities are not fully utilized. In 1950, 10,000 tons of core wire and 500 tons of finished electrodes were imported [redacted] The DDR furnished only 1,500 tons of core wire from indigenous sources (Hennigsdorf). The shortage of electrodes and/or the necessary titanic acid to produce them (see Item 17) is a primary bottleneck for such industries as the shipyards, Wismuth AG and the production of railroad cars (tanks?). [redacted] 50X1-HUM

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[redacted]

36. Smelting Electrodes

The primary users are foundries and smelters in the Soviet Zone, especially VVB Mansfeld and VEB Lippendorf. Until recently war stocks were still available and some plants (Lippendorf) found methods to produce electrodes suitable for their special requirements, but since autumn 1950 the steel mills have complained of a severe shortage.

37. Priming pumps

[redacted] 50X1-HUM

[redacted] early in 1950, when deliveries were stopped, two firms in the DDR, SAG Schaeffer & Buddenberg in Magdeburg, and VEB Presto in Chemnitz, started local production. They still lack high-grade alloys for mass production. A bottleneck for some time to come.

38. Cardan Shafts

There is only one plant in the DDR capable of making cardan shafts: VEB Gelenkwellenwerk Stadtilm, Thueringen, formerly Borsig. Capacity 30,000 shafts per month. Production 10,000 - 12,000 per month. Ninety percent of their production goes to a Soviet Office in Wildau, Landkreis Teltow, possibly for use in tanks. The remaining ten percent are distributed to the German economy via VVB Ifa Chemnitz. [redacted] 50X1-HUM

[redacted] St steel 60.11, Steel EC 50 and EC 100. About 500 to 600 tons of the essential steel is imported per year. A potential bottleneck.

[redacted] 50X1-HUM

39. Automobile Parts and Equipment

There are four automobile factories in the DDR. The SAG Automobilfabrik Eisenach, formerly BMW, the two plants of the IFA Zwickau, formerly Audi and Horch, and the Automobilwerk Zittau, formerly Phaenomen. All of them make a limited amount of spare parts for their own cars, the supply, however, is so short that even some SAG enterprises could not get IFA parts in August 1950. For all cars of West German make the owner must rely on a very lucrative illegal trade via West Berlin. Even Wismuth and SAG's participate in such transaction. A severe bottleneck.

40. Roller Chains

No production facilities in the DDR. 50X1-HUM

Diesel locomotives previously constructed with chain drives, for instance, are now equipped with drive shafts. A serious shortage.

41. Tools

As a consequence of the shortage of high-grade steel alloys, described in Item 11, tools are extremely short in all industrial enterprises. In some plants workmen are required to furnish their own tools. Even such crucial plants as Wismuth AG cannot get new tools in the required amount. A primary bottleneck.

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42. Spare Parts for Machinery

There is a lucrative barter market for spare parts of all types of machinery. Illegal trade with the west is voluminous. This applies especially to plants such as, Boehlen Benzinwerke, whose installations were originally furnished by West German factories. A serious bottleneck.

43. Compressors

The DDR has but three compressor factories. Most of their output goes for reparations. The shortage of compressors is so great that even some of the uranium pits of Wismuth AG have to be ventilated by use of old airplane motors. Increase in the production of compressors is dependent upon the delivery of materials The VEB Kompressorwerk Dessau was forced to discharge 200 men in May 1950 when their compressor output was cut to one per week for lack of raw materials. 50X1-HUM

44. Pumps

The manufacture of pumps is about in the same state as that of compressors. Again Wismuth and other mining enterprises are the primary victims. The principal industries effected are those producing copper, uranium, potash, coal, etc.

45. Chilled Iron Rollers

The sole producer of chilled iron rollers in the DDR is the Eisenwerk Coswig/ 50X1-HUM
Saxony. The surfaces of their rollers are of very low quality.
Since
the embargo the Soviets have furnished limited quantities of unknown origin. 50X1-HUM
there have been some illegal deliveries
(see Item 9).

46. Spraying Nozzles and Spinning Pumps 50X1-HUM

These are required for the production of synthetic fibres and must be made of gold or platinum. Each machine needs some 100-200 nozzles, the average life of one nozzle is nine months. The bulk of the demand is met by illegal compensation deals between the DDR Ministry of Industry 50X1-HUM
producers. A potential bottleneck.
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47. Spark Plugs

There are no production facilities for spark plugs in the DDR. The principal customers are the four automobile factories. Normal replacement demand of the consumer is not inadequately. A potential bottleneck.

48. Light Bulbs

A shortage of tungsten and molybdenum limits production to the most essential needs. Normal consumers can purchase supplies only in high price HO stores. A considerable number of enterprises have converted to fluorescent light. Production plans call for an increase in production of fluorescent type lamps. Apparently a bottleneck.

49. Transformers

The entire production of the only transformer plant in the DDR, the former AEG plant in Berlin, is scheduled for reparation. The main bottleneck is transformer sheets. Until recently wartime stocks were available, now cannibalization must be resorted to. No improvement of the situation is anticipated. A severe bottleneck.

50. Electric Motors 50X1-HUM

The production capacity is not fully utilized for lack of dynamo and copper sheets (see Item 7). Even repair and overhaul work is hampered by the shortage. Key personnel in critical plants such as SAG Puna and VEB Stahl, Riesa, consider electro motors a primary bottleneck and anticipate serious production difficulties in the next few years.

51. Cable (wire rope)

There are no cable producing facilities in the DDR. The minimum monthly demand for such industries as mining, copper, coal, uranium, potash, and numerous allied and subsidiary branches, is 200,000 meters per month. Prior to the embargo this demand was met by deliveries from the following West German firms: Dortmunder Drahtseil-Werke, Fa. Koks, Muehlheim/Ruhr, Westphaelische Drahtseil Union, and Felten & Guillaume. 50X1-HUM